

Project Status Update 2

East Thetford Road over Connecticut River Bridge Rehabilitation

Lyme, New Hampshire – Thetford, Vermont

November 2022

In February 2022 the Department prepared a *Project Status Update* and a *Frequently Asked Questions* document to provide important information regarding the project and to help dispel any misinformation that was circulating through the general public. These documents are available here: <https://www.nh.gov/dot/projects/lymethetford14460/index.htm>. This subsequent update has been specifically developed to address recent blog and community listserv speculation and misinformation.

It is also important to note that as this is a State-owned bridge, the State agencies: New Hampshire Department of Transportation (NHDOT) and Vermont Agency of Transportation (VTrans), have worked along with the Federal Highway Administration (FHWA), who provides funding, oversight, and is the ultimate decision-maker for the project, and have followed the necessary processes, and will be moving forward as planned. However, the additional information below is being provided to address any additional misinformation that is currently being circulated.

Current Project Status

The project was re-advertised on May 31, 2022, with changes in the contract to allow for greater flexibility in completion of the work. These changes were made to address the concerns of the seven contractors who opted not to submit bids during the Fall 2021 bidding period. Three bids were received for the project during this second round, and after review and approval by NHDOT, VTrans and FHWA, the contract was awarded to the lowest responsive bidder, New England Infrastructure, Inc.

The Pre-Construction Conference was held on November 2, 2022, to establish the lines of communication between the Contractor and NHDOT construction personnel, review environmental and other construction requirements, and discuss various administrative procedures. Construction is now under way as the utility owners begin work to relocate the utility lines present on and around the bridge. The contractor is anticipated to begin the pier rehabilitation this winter as they prepare to begin work on the superstructure next spring.

Project Origins

This project originated out of the NHDOT's Bridge Rehabilitation and Replacement program which administers the larger, more complex bridge projects, to address the bridge's structural condition. It has been included in NH's Ten Year Transportation Improvement Plan (TYP), starting with the 2003-2012 TYP to allocate funds for these repairs. The TYP is the first place where the public would become aware of an upcoming project. The projects in the plan are developed in conjunction with Region Planning Commissions (RPC) around New Hampshire in coordination with VTrans and Vermont's Regional Planning Commissions, presented at a series of Public Hearings, and eventually signed into law. Each version of the TYP builds on the previous one as new projects are added in the last two years and projects in the earlier years move closer to beginning design and construction. This project was advanced forward within

NHDOT Ten Year Plans based on comments and a request from New Hampshire's Upper Valley Lake Sunapee RPC and Vermont's Two Rivers-Ottauquechee RPC to move the project forward as a Bridge Rehabilitation to address the deteriorating condition of the bridge and the need for vehicle weight restrictions.

The development of the TYP considers regional needs, as identified by the RPCs, and must be fiscally constrained. The scope of these projects is set during this process to address a specific transportation purpose or need. In the case of this, and most, bridge rehabilitation projects, the purpose was to address the poor condition of the structure while maximizing its service life. New Hampshire has approximately 4,600 miles of State-owned roadways and approximately 2,160 State-owned bridges in 234 communities across the state. Available funding must be carefully allocated to address as many needs as possible across the State and does not often allow funding for "wants".

Due to the available funding and the considerable needs of transportation infrastructure, maintaining our bridges in a state of good repair to support overall mobility on the highway network presents many challenges that require strategic investment decisions. Federal MAP-21 legislation requiring the development of asset management systems to help guide investment strategies, has led State Transportation Agencies, including NHDOT, to prioritize maintaining and preserving the existing infrastructure over building new infrastructure whenever possible and cost-effective.

NEPA and Section 4(f) Compliance

In New Hampshire, projects of this magnitude are Federally funded, unless they are on the Turnpike system. These projects must follow the National Environmental Policy Act (NEPA), and all of the associated environmental regulations. Two regulations of special relevance are Section 106 of the National Historic Preservation Act and Section 4(f) of the US DOT Act of 1966 and 23 CFR 774. As the Department has repeatedly stated, it is the bridge's eligibility for the National Register, not its listing, that affords it protection under Section 4(f), and further, that the feasible and prudent alternative that avoids the use of a historic resource or that results in the least harm to the resource must be selected for implementation.

Several community members have indicated that they don't believe the bridge should be considered historic. Section 106 of the National Historic Preservation Act requires Federal agencies including the FHWA to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve. During the Section 106 review process, the FHWA, in consultation with the NH Division of Historical Resources (NHDHR), the VT Division for Historic Preservation (VDHP), NHDOT, VTTrans, and any identified consulting parties, determined that this bridge is eligible for the National Register.

This bridge is an excellent example of mature Parker truss bridge type (only 1 of 3 remaining in NH) and is the longest Parker truss in NHDOT's inventory. Its design, which is well-suited to riveted, rigid connections and long spans, along with its history associated with the flood relief that followed the 1936 floods that damaged the Connecticut River Valley, contribute to its historic nature that make it eligible for, and led to its listing on, the National Register of Historic Places. More information about the historic aspects of the bridge can be found on the NHDOT Historic Bridge Review GIS website, available through the following document: https://www.nh.gov/dot/org/projectdevelopment/environment/units/program-management/documents/HBI_ReviewerGIScheatsheet2021.pdf

In addition to the bridge, there are two other eligible properties and two sites of archeological interest within this project area, and therefore these must also be considered under Section 4(f). While public input is encouraged during the Section 106 process to identify and review historic resources, the National Register eligibility of a resource is not something swayed by public opinion as individual or collective personal feelings about the historic nature of the bridge or other sites will not change the fact that they are eligible for the National Register of Historic Places and qualify for consideration under Section 4(f). The bridge rehabilitation alternative was selected, in accordance with Section 4(f) as it is feasible to do so, is the least harmful to the historic bridge, and avoids impacts to the other cultural resources that include the former Toll House located in the northeast quadrant.

Public Outreach

Some in the community have indicated that the public was not aware of this project. NHDOT held two Public Information Meetings, in Lyme in 2014 and in Thetford in 2015, as part of the NEPA and Section 106 process during the project's preliminary design phase. For this type of project, meeting notices are provided to nearby property owners, environmental agencies, and Town and State elected officials via mail, and placed in local and regional newspapers.

As noted within the project meeting minutes, the Lyme Heritage Commission was in support of the rehabilitation effort and they requested Consulting Party status under the Section 106 process, which was granted by FHWA in August 2014.

As evidenced by the sign-in sheets, there were members of both Select Boards and elected State Officials in attendance. The Towns, and their governing bodies, did in fact know about the project. There is no requirement that every resident in a community or region be notified. It is also important to note that NEPA and Section 106 require the opportunity for the public to comment for project design consideration.

Selected Alternative and Traffic Control

Contrary to some of the comments circulating about the project, this is not a new bridge. This is a project which will provide for the rehabilitation of a historic structure. Rehabilitation means that we must work within the confines of the existing bridge and the associated environmental regulations. Each bridge project is unique, so depending on the particulars of a given bridge, the work necessary as part of the project, and traffic volumes it is sometimes possible to phase construction by rehabilitating half of the bridge at a time to provide a single lane of traffic. It is not possible to maintain traffic on this structure during construction due to the type of work needed. The deck, outer stringers, and selected floorbeams necessary to maintain traffic on the bridge need to be removed and replaced, which does not allow for maintenance of traffic during construction.

Over the years, New Hampshire and Vermont have successfully rehabilitated many bridges over the Connecticut River with various traffic control measures depending on the particulars of the bridge, traffic volumes, available right-of-way, and environmental regulations in place at the time. Several have included closure of the bridges to complete the work. We understand the inconvenience associated with closing crossings; however, we have and will continue to coordinate closely with local officials and emergency responders to provide the safest and quickest possible alternatives. State traffic data shows that in 2021 this bridge carried an average of just under 2,100 vehicles per day. When reviewed against other Connecticut River crossings, this site is relatively low-use and located in reasonable proximity to

other available crossings, particularly for anyone traveling out of town. Therefore, given available detour routes and lack of necessary space, along with consideration of the significant cost of construction, private property impacts on both sides of the river, and environmental review and permitting, a temporary bridge is not practical for this project and is not proposed.

Resident Estimate of user costs

Since there are approximately 2,100 trips per day over the bridge, which means that approximately 1,050 vehicles are impacted, assuming each make one trip over and one trip back. The alleged \$45 million dollar impact cost is far overinflated. As all 1,050 trip generators do not live directly on one side of the bridge and travel the full detour to the other shore, it is difficult to calculate the precise increase in travel time or cost. Given the bridge's proximity to Interstate 91, it is very likely New Hampshire residents looking for access to the highway for travel to locations in White River Junction, Lebanon, and Hanover account for a large percentage of these trips.

The decision to move forward with a particular project design is based on many factors including engineering feasibility, natural and cultural resources, impacts to utilities and private property owners, current and potential future use, and cost. While the inconvenience to the traveling public of temporarily closing the bridge was an important consideration during the public outreach and design, other factors such as the need to take private property through eminent domain to construct a temporary bridge were also considerations that ultimately led to selection of the proposed temporary detour.

Emergency Response

Emergency response is a topic discussed at every initial project meeting where a road closure is being proposed. This topic was discussed at the Public Meetings and the attendees, including Select Board members indicated that the Towns are part of a regional mutual aid association. The bridge is currently posted "15 Tons". Vehicles weighing over 15 tons, such as most fire trucks, are currently prohibited from traveling over it.

Both Towns are part of the Upper Valley Regional Emergency Services Association, which is in place to assist smaller communities in responding to emergencies within their Town. Membership includes the neighboring communities of Fairlee, Norwich, Sharon, and Strafford, VT and Orford, Canaan, Hanover, and Lebanon, NH.

While Lyme and Thetford may frequently provide aid to one-another, the Towns should already be drawing on these other communities for fire response requiring vehicles over 15 tons, and for the duration of the project, they will need to draw on them for EMS and smaller fire apparatus as well.

Desire for a "different" project

Unfortunately, transportation projects are inherently inconvenient, but the alternative to investing in infrastructure improvements is to do nothing, resulting in continued deterioration, which later requires greater inconvenience, effort, and cost to address. NHDOT is aware that there is a movement within the communities to promote a "different" project. As described above, this project has been developed in compliance with all applicable Federal and State regulations and requirements. There is no opportunity

to develop a “different” project using Federal funding as this is what was determined by FHWA to be feasible and prudent under Section 4(f).

There are potentially serious repercussions with not proceeding with the project as planned, including considerable delays, our obligation to maintain the existing transportation system, and the possible lowering of the current 15-ton weight limit and eventual, indefinite, closure of the bridge to traffic due to its continued deterioration. Inaction could be challenged even more strongly as there is demonstrated need, support, and approval of the project as it is currently designed with a bridge rehabilitation that maintains the historic nature of the river crossing.

This delay would also mean that the States must pay back approximately \$1.3 million in engineering and right-of-way costs to FHWA and forfeit the \$9.7 million currently dedicated for the bridge construction while reimbursing the selected Contractor for their efforts associated with the project to date. Additionally, the project would have to be permitted under future environmental regulations and compete with other needs in the program, with no guarantee that it would be funded.

New Bridge Alternative

As stated in the previous *Project Status Update*, a bridge replacement was reviewed during the alternatives analysis phase early in the project while NHDOT and VTrans were working to determine the most feasible and prudent alternative. The replacement alternative would have required a substantial increase in the roadway elevation to accommodate the necessary clearance over the river, resulting in impacts to the surrounding private properties and the utilities lines that cross the river. The replacement alternative would also have required closure of the crossing for up to three construction seasons during construction due to the amount of space available and the nature of the work required. The associated cost of construction, as adjusted for 2022 figures, would be approximately \$20 million, versus the rehabilitation amount of just under \$9 million. As explained above, a new bridge alternative was thoroughly considered but was not determined to cause the least harm under Section 4(f) and therefore was not selected for implementation.

Closing

These decisions have been made by experienced and qualified engineers, project managers, and environmental staff at both NHDOT and VTrans, in conjunction with and with approval from the Federal Highway Administration and the numerous state and federal environmental agencies that review transportation projects under the federal NEPA requirements. It is never possible to satisfy all parties as part of a project solution, therefore decisions are made that best address the purpose and need of given project in the most feasible and reasonable manner within the fiscal and legal constraints. Yes, it will be impactful during construction but in the long run the bridge will be repaired and retained, and continue to serve the transportation network in this area between the two States for many years to come. As such, construction of this rehabilitation project will continue to move forward to address the poor structural condition of the existing Parker Truss bridge.